INPUT DEVICE WITH PATTERN AND TACTILE FEEDBACK FOR COMPUTER INPUT AND CONTROL

Abstract of the Invention

A user interface generally includes a display, a user interface selection device, and a user interface interpretation module for interpreting user information transmitted to the interface. The tactile input device is a user interface selection device used to transmit user information to the user interface interpretation module. The tactile input device allows a user to activate and operate applications running on a computing system through a single user interface selection device. The tactile input device includes a tactile surface angularly divided into a plurality of sections, or petals. The tactile surface is further separated by a central portion and an outer circumferential portion, neither of which are angularly divided by the petals. Each petal and portion are tactilely distinguished from an adjacent petal or portion. The tactile distinction provides a user with feedback relating to orientation over the surface such that the user may request the performance of a specific task to be implemented by the computer through the user interface interpretation module. Each petal and portion has at least one input sensing device for detecting an input stroke identifying a user request and transmitting a selection signal indicative of the selection to the user interface interpretation module. Each selection signal contains requests for the user interface interpretation module to perform a specific task in the computing system. The task may be text or character input, activation of an application on the user interface, or operation of an application operating through the user interface.